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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,857	10/04/2001	Julie A. Symons	HP-10013861	2920

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HEWLETT-PACKARD COMPANY  
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EXAMINER
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DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/971,857

Applicant(s)

SYMONS ET AL.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on April 25, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**Response to Arguments**

Applicant's arguments, see page 9-12, filed April 25, 2005, with respect to the rejection(s) of claim(s) 1-27 under 35 USC 102(b) and 35 USC 103(a) have been fully considered but are moot in view of the new grounds of rejection. Therefore, the previous rejection mailed January 21, 2005 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is presented.

**DETAILED ACTION**

Claims 1-27 are presented for examination.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-5, 10-14 and 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Arkko et al. (hereinafter Arkko, U. S. Patent No. 6,535,517 B1).

As per claim 1, Arkko explicitly discloses a method for managing a network infrastructure comprising: storing an expected network infrastructure description (fig. 5A item #505, col. 9 L6-7); comparing said expected network infrastructure description with a current network infrastructure description (col. 9 L15-18, col. 2 L35-40, L62-65); and outputting a result of said comparing, wherein differences between said expected network infrastructure description

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and said current network infrastructure disruption are displayed (col. 14 L14-16 and col. 13 L1-23).

As per claim 2, Arkko discloses a system wherein the network infrastructure is a switched network infrastructure (fig. 1-4 and col. 3 L50-67).

As per claim 3, Arkko discloses the process of implementing a change of said network infrastructure with a configuration agent and storing said change in said expected network infrastructure description (col. 9 L46-57 and col. 14 L32-34).

As per claim 4, Arkko discloses the process of collecting said current network infrastructure description (col. 10 L21 to col. 12 L24).

As per claim 5, Arkko discloses the process wherein said collecting current network infrastructure description further comprises using agents to collect said current network infrastructure description (col. 10 L21 to col. 12 L24).

As per claims 10-14 and 19-23, they do not teach or further define over the limitations in claims 1-5. Therefore, claims 10-14 and 19-23 are rejected for the same reasons as set forth in claims 1-5.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 6, 15 and 24 are rejected under 35 U.S.C. 103(a) as being obvious over Arkko et al. (hereinafter Arkko, U. S. Patent No. 6,535,517 B1) in view of Miyake et al. (hereinafter Miyake, Pub. No. US 2001/0042118 A1).

As per claim 6, Arkko does not explicitly disclose the process of converting said expected network infrastructure description into an expected network infrastructure graphical description and converting said current network infrastructure description into a current network infrastructure graphical description. Miyake, from the same field of endeavor, explicitly discloses the process of displaying two-dimensional data in a two-dimensional display area and all portion of the two-dimensionally displayed data is displayed three-dimensionally in a three-dimensionally area (read as network infrastructure description is converted to network infrastructure graphical representation, see abstract; fig. 27 and fig. 68 item #32 displayed graphically as item #47). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Miyake as stated above with Arkko in order to convert the expected and current network infrastructure description to the expected and current network infrastructure graphical description. One of ordinary skilled in the art would have been motivated because it would have analyzed the network infrastructure more

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efficiently by converting the two-dimensional data (network description) to three-dimensional data (graphical representation).

As per claims 15 and 24, they do not teach or further define over the limitations in claim 6. Therefore, claims 15 and 24 are rejected for the same reasons as set forth in claim 6.

3. Claims 7, 16 and 25 are rejected under 35 U.S.C. 103(a) as being obvious over Arkko et al. (hereinafter Arkko, U. S. Patent No. 6,535,517 B1) in view of Miyake et al. (hereinafter Miyake, Pub. No. US 2001/0042118 A1), and further in view of Benfield et al. (hereinafter Benfield, Pub. No.: US 2003/0009552 A1).

As per claim 7, Arkko in view of Miyake does not explicitly disclose the process of comparing said expected network infrastructure graphical description with said current network infrastructure graphical description.

Benfield, from the same field of endeavor, discloses the process of comparing topology maps of two different states (read as comparing two graphical representation of network infrastructure, pg. 17 block #218-223). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Arkko in view of Miyake by incorporating the teaching of Benfield as stated above in order to compare expected network infrastructure graphical description with current network infrastructure graphical description.

One of ordinary skilled in the art would have been motivated because any changes in network topology would have been displayed using graphical changes such that user would have easily discerned the topology changes and/or an administrative user would have been able to view one or more changes in topology over a period of time (Benfield, pg. 17 block #220, 222).

As per claims 16 and 25, they do not teach or further define over the limitations in claim 7. Therefore, claims 16 and 25 are rejected for the same reasons as set forth in claim 7.

4. Claims 8, 17 and 26 are rejected under 35 U.S.C. 103(a) as being obvious over Arkko et al. (hereinafter Arkko, U. S. Patent No. 6,535,517 B1) in view of Fitzgerald et al. (hereinafter Fitzgerald, U. S. Patent No. 5,581,764).

As per claim 8, Arkko does not explicitly disclose the process of outputting a list of devices from said expected network infrastructure description which are missing from said current network infrastructure description, outputting a list of devices from said current network infrastructure description having a different configuration from the configuration of said devices in said expected network infrastructure description and outputting a list of devices from said current network infrastructure description which are not described in said expected network infrastructure description.

Fitzgerald, from the same field of endeavor, discloses the method of comparing a Should have list (SH, read as expected network infrastructure description) and Already have list (AH, read as current network infrastructure description) of network resources (fig. 24 block #98) and based on comparison, generating (read as outputting) a Need List that identifies items that are present in the AH list but absent from SH list (col. 5 L10-30). A Need list also identifies resource deletions, additions, and updates necessary to configure a desktop (read as list which identifies the missing component, not described component and component with different configuration in either expected or current network infrastructure description, fig. 24 item #98 and #100 and fig. 25 item #112, #114, #116 and #118; fig. 3 considering an update function for a device with different configuration, delete function for a deleting devices or resources that are

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missing from current network infrastructure description and adding function for adding resources that are not described in expected network infrastructure description or Should have list; col. 5 L10-57). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Fitzgerald and combine with Arkko in order to output a list of devices that are missing from current network infrastructure description, devices or resources having a different configuration from expected configuration and devices that are not described in expected network infrastructure description.

One of ordinary skilled in the art would have been motivated because doing would have automated and enabled the management of changes in a distributed computing environment (Fitzgerald, col. 8 L15-21). It would have also articulated and managed the specific system configuration requirements and would have further permitted dynamic reconfiguration of a system based upon policy changes and system technology configuration changes (Fitzgerald, col. 7 L30-35). Also, it would have enabled resource deletions, additions, and updates necessary to configure computer systems in accordance with administrator requirements (Fitzgerald, col. 5 L35-40).

As per claims 17 and 26, they do not teach or further define over the limitations in claim 8. Therefore, claims 17 and 26 are rejected for the same reasons as set forth in claim 8.

5. Claims 9, 18 and 27 are rejected under 35 U.S.C. 103(a) as being obvious over Arkko et al. (hereinafter Arkko, U. S. Patent No. 6,535,517 B1) in view of Burgess et al (hereinafter Burgess, U. S. Patent No. 5,696,701).

As per claim 9, Arkko does not disclose the process of outputting a message stating that expected network infrastructure description and current network infrastructure description are



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identical. Burgess discloses the process of outputting a message indicating that an event has occurred, wherein the message includes data about the event (col. 6 L18-25). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Burgess and combine with Arkko in order to output a message stating expected and current infrastructure description are identical. One of ordinary skill in the art would have been motivated because it would have informed and/or notified the network administrator about the status of the network infrastructure and/or changes occurred in the network infrastructure if there are any.

As per claims 18 and 27, they do not teach or further define over the limitations in claim 9. Therefore, claims 18 and 27 are rejected for the same reasons as set forth in claim 9.

#### **Additional References**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Huang et al., U. S. Patent No. 6,735,548 B1.
- b. Tezuka et al., U. S. Patent No. 6,047,320.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 15, 2005.

  
**ZARNI MAUNG**  
**SUPERVISORY PATENT EXAMINER**